24. (Twice Amended) A method of processing a semiconductor substrate, comprising:

E1

depositing a first layer comprising silicon carbide on the semiconductor substrate;

exposing the first layer to a plasma consisting essentially of an inert gas; and

depositing a second layer comprising a material selected from the group of un-doped silicon glass, fluorine-doped silicon glass, and silicon-carbon-oxygen based material over the first layer.

25. (Cancelled) The method of claim 24, wherein the first layer comprises silicon carbide.

26. The method of claim 24, wherein the inert gas is He.

E2

28. (Cancelled) The method of claim 25, wherein the inert gas is He.

30. The method of claim 24, wherein the exposing the first layer to the plasma comprises flowing the inert gas into a processing chamber at a rate of about 100 to about 4000 sccm, establishing a chamber pressure between about 1 to about 12 Torr, and applying RF power to an electrode of the processing chamber to provide a power density of about 0.7 to about 11 W/in^2.

E3

31. The method of claim 24, wherein the exposing the first layer to the plasma and the depositing the first layer are performed in a single processing chamber.

32. (Cancelled) The method of claim 25, wherein the exposing the first layer to the plasma and the depositing the first layer are performed in a single processing chamber.

33. (Thrice Amended) The method of claim 26, wherein exposing the first layer to the plasma does not substantially change a composition of the first layer as detected by a fourier transform infrared analysis.

34. (Twice Amended) A method of processing a semiconductor substrate, comprising:

depositing a silicon carbide layer on a semiconductor substrate;

treating the silicon carbide layer with a plasma consisting essentially of an inert gas; and

depositing a layer comprising a silicon-carbon-oxygen based material over the silicon carbide layer.

35. (Twice Amended) The method of claim 34, wherein the treating the silicon carbide layer increases the oxidation resistance of the silicon carbide layer.

E3

36. (Amended) The method of claim 34, wherein the treating the silicon carbide layer prevents delamination of the layer comprising the silicon-carbon-oxygen based material from the silicon carbide layer.

37. (Cancelled) The method of claim 34, wherein the first layer comprises silicon carbide.

38. The method of claim 34, wherein the inert gas is He.

E4

40. (Cancelled) The method of claim 37, wherein the inert gas is He.

E5

42. (Twice Amended) The method of claim 34, wherein the treating the silicon carbide layer comprises exposing the silicon carbide layer to the plasma generated by flowing the inert gas into a processing chamber at a rate of about 100 to about 4000 sccm, establishing a chamber pressure between about 1 to about 12 Torr, and applying RF power to an electrode of the chamber to provide a power density of about 0.7 to about 11 W/in^2.